# Edington

1. Proved during a solar eclipse that light is bent by gravity of the sun. Stars that should appear behind the sun were appearing just next to the sun.
2. This proved Einstein’s theory of special relativity and made him famous.

LeMaitre

1. Catholic priest studies Einstein’s work and decided that all matter must be expanding if it is not collapsing. If the universe is expanding then it must have been an infinitely dense point a primeval atom at some time in the past and it must have exploded.

Hubble

1. Discovered with a massive telescope that there are about a billion stars in the Milky Way galaxy and that there are millions or billions of other galaxies in the universe.
2. He measured the distances to 9 and realized that they were moving away from one another at a rapid rate.
3. He tried to calculate how long ago these galaxies would have been at a central point (2 billion years) he was way off (formula was right but measurements were wrong)
4. He did prove that the universe was expanding

Hoyle

1. Steady State Theory- universe was not expanding but was static.
2. Nucleosynthesis- under extreme heat and pressure, atomic nuclei can be fused to heavier elements

Gamow

1. Said the universe should be glowing with energy that is left over from the “Big Bang” and this energy should be everywhere

Alpher

1. Did the math and physics for gamow to show how the universe synthesized elements during the Big Bang
2. Should be 75% hydrogen and about 24% Helium

Dicke

1. Study at Princeton to create a Dicke radiometer to find the leftover energy from the Big Bang

Penzias and Wilson

1. Working for bell Telephone lab in New Jersey and found the leftover radiation. The researched it and found the work of Gamow, Alpher, and Dicke and they published their findings.
2. Won the Noble Prize in 1978
3. Proved Hoyle’s Steady State Theory wrong but his theory of Nucleosynthesis was correct

Guth

1. Inflation Theory- explained how the Big Bang caused the universe to have a uniform temperature
2. Within the first fraction of a second after the big bang gravity split off from the existing superforce causing the universe to expand faster than the speed of light and have uniform temperature. Later the other force electromagnetism strong nuclear force and weak nuclear force split off

Hawkings

1. Modern day Einstein who studies the quantum physics behind black holes, warm holes, ect.
2. He is the master of the thought experiment. He is the leading mind in the world today.
3. Confined to wheel chair and can only move his one finger slightly… this is how he communicates.